

LYNGDORF AUDIO TDAI-1120

OWNER'S MANUAL

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Welcome

Congratulations on your purchase of the Lyngdorf Audio TDAI-1120 fully digital amplifier with Room-Perfect™. With this purchase, you have joined the ranks of an elite group of people who believe that perfect sound is more than a luxury. It's a requirement. The TDAI-1120 will deliver an audio experience that will far exceed your expectations. We thank you for placing your confidence in Lyngdorf Audio.

This manual will give you an overview of how to set up your system. Please read the manual carefully to better understand the capabilities of your TDAI-1120. For more in-depth information about the technologies used in Lyngdorf Audio products, please visit www.lyngdorf.com.

Compliance

WEEE

The European Parliament and the Council of the European Union have issued the Waste Electrical and Electronic Equipment Directive. The purpose of the Directive is to prevent waste of electrical and electronic equipment and to promote reuse, recycling, and other forms of waste recovery. Lyngdorf products and the accessories packed with them are subject to the WEEE Directive. Please dispose of any waste materials in accordance with your local recycling regulations. Products and equipment which must be collected for reuse, recycling, and other forms of recovery are marked with the icon of the crossed-out waste receptacle.



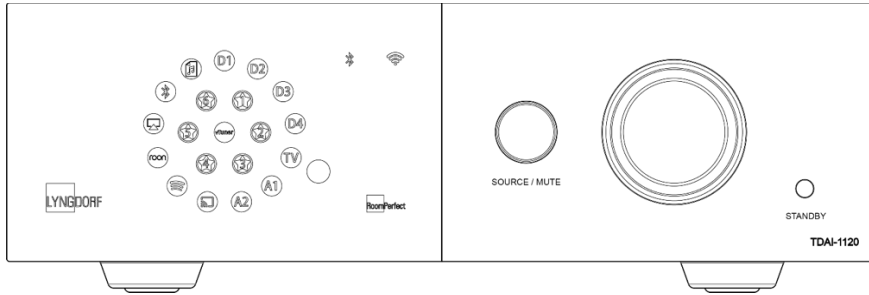
FCC

Lyngdorf products and accessories comply with parts 15 and 68 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference; and (2) this device must accept any interference received, including any interference that may cause undesired operation.

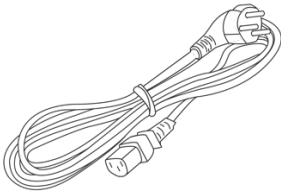
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. Equipment marketed to a consumer must can comply with the necessary regulations in the configuration in which the equipment is marketed.

What is in the box

TDAI-1120

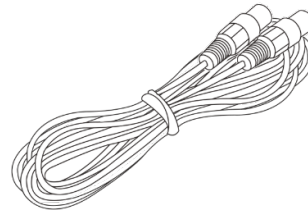


Accessories



Mains cord

- Universal Mains detection
- Mains Inlet: IEC320



8 m (26 feet) XLR – XLR cable



RoomPerfect™ Microphone



Microphone stand

What is NOT in the box

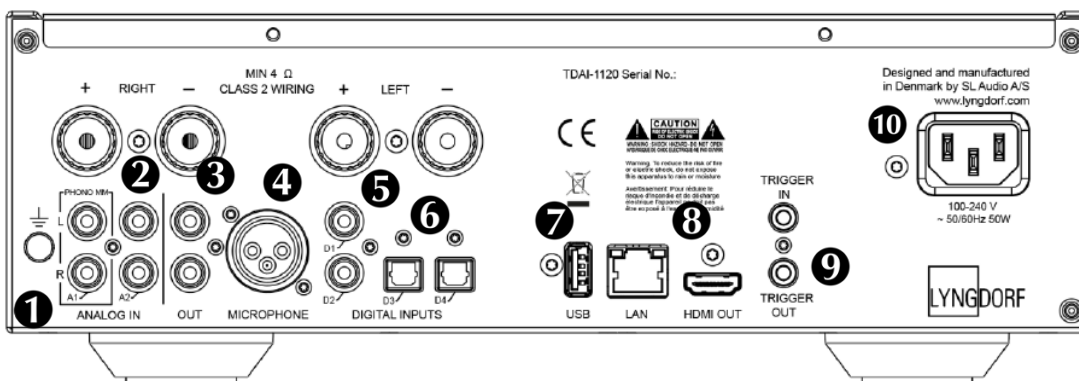
In order to install the TDAI-1120 you will need:

- A pair of loudspeakers
- Speaker cable from TDAI-1120 to each of the speakers (min. 1.5mm gauge)

How to get started

Before you connect the TDAI-1120 to mains power, you need to connect loudspeakers and other sources of audio. If you have a local network, the connection by wire is recommended, as it provides more stable and faster network connection than Wi-Fi.

The TDAI-1120 holds a wide range of connectors on the back for external audio sources in addition to the streaming options available through Bluetooth or your network.



1. A1/PHONO MM: Connects directly to turntables/gramophones with high output cartridges (MM: Moving Magnet). The ground cable from the turntable/gramophone connects to the finger screw.

2. A2/ANALOG IN: Connects to tape recorders and other analog sources.

3. OUT: Connects to subwoofer(s), tape recorders, external amplifiers or headphone amplifier.

4. MICROPHONE: Connects to the microphone and microphone cable for RoomPerfect™ calibration.

5. D1-D2 COAXIAL DIGITAL INPUTS: Connects to CD players and other digital sources.

6. D3-D4 OPTICAL DIGITAL INPUTS: Connects to CD players and other digital sources.

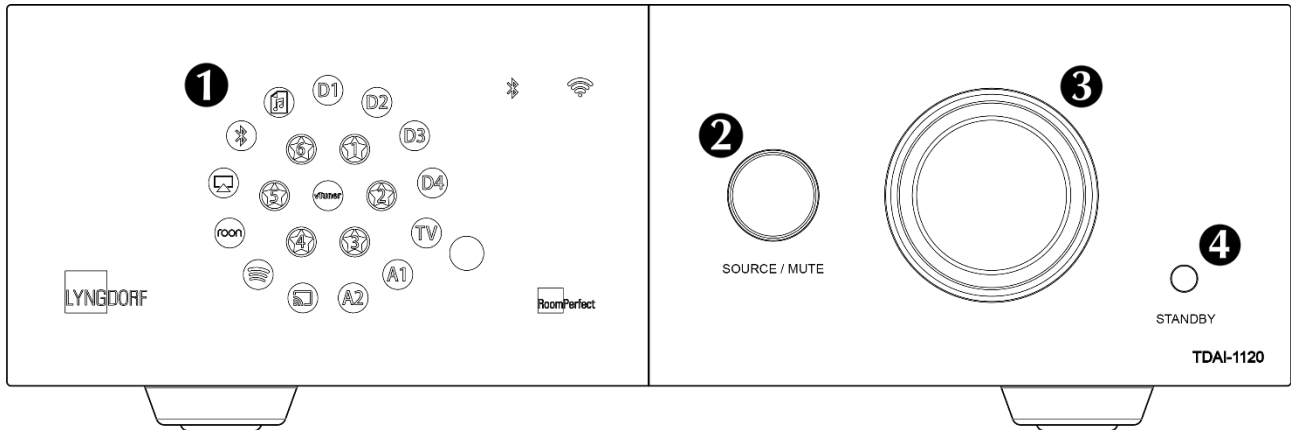
7. USB: Connects to your FAT32 formatted USB storage (Pen Drive or Network Attached Storage, NAS). This connector can also power the external storage drive or other devices.

8. HDMI OUT: (No video output) Connects to your Televisions HDMI ARC connector for playing TV sound.

9. TRIGGER IN/OUT: These connectors allow you to have the TDAI-1120 activated by another product – or to have the TDAI-1120 activate other products, when turned on and off.

10. MAINS POWER: Always use a mains cable that fits your mains power outlets. The TDAI-1120 will automatically adjust to the mains power available.

Front panel controls



1. Display Indicators for the selected input, Bluetooth connection and Wi-Fi connection. Indicator for RoomPerfect™ calibration.

2. Source/Mute Press to mute and unmute. Rotate left and right to toggle between audio inputs.

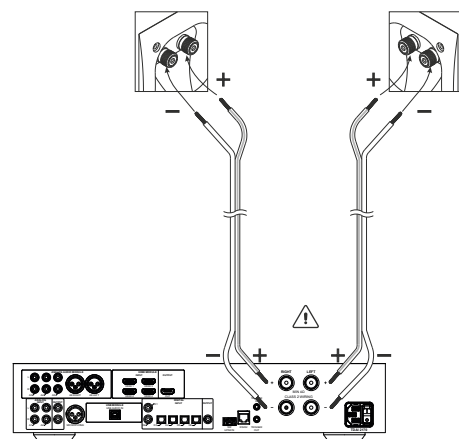
3. Volume wheel Adjust the volume with left or right rotation. Light indicator for volume setting

4. Standby button Turns the TDAI-1120 on and into standby.

Connecting speakers and subwoofers

When connected to a pair of speakers and a source like a CD Player, the TDAI-1120 functions as any other integrated amplifier – but it can do so much more.

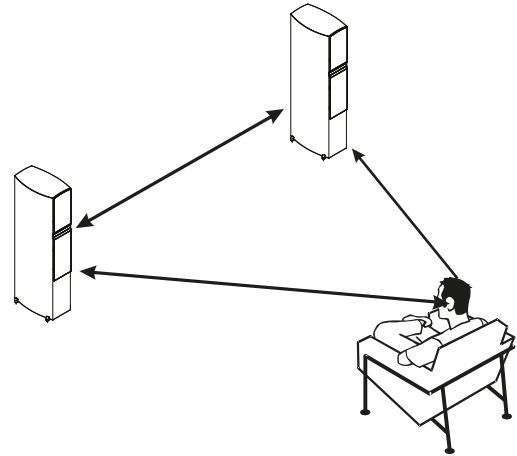
When connecting the speakers, always connect + and - from the amplifier to the corresponding + and - terminals on the speaker.



Tips for setting up speakers

You can use the stereo triangle as a good rule of thumb when determining where to place your speakers. The distance between the speakers should be the same as the distance from your listening position to both speakers.

If your room does not accommodate the optimal listening setup, the TDAI-1120 can compensate for this, when you enter the actual distances to each speaker through the Speaker Setup Guide.



Speaker placement with RoomPerfect™

With a RoomPerfect™ calibration available, you can place the speakers up against the wall without negative effects to the sound.

If your speakers have a bass-reflex port on the back, you should though allow for a 5cm/2in clearance to the wall. This will ensure there is no disruption to the functionality of the port.

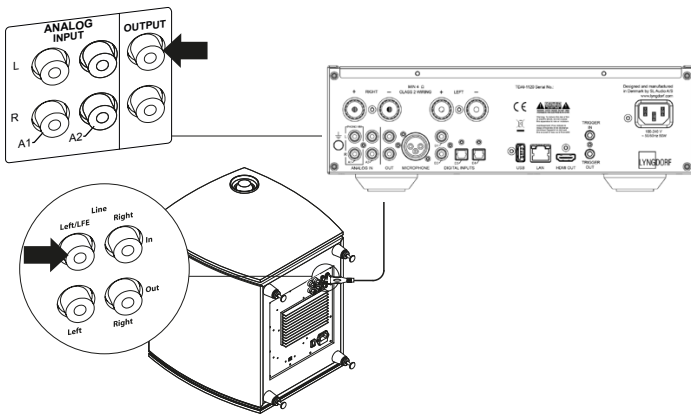
Connecting a subwoofer

The TDAI-1120 features a crossover function for optimal integration with any subwoofer.

When connecting to a Lyngdorf BW type subwoofer, you connect the analog output of the TDAI-2170 to the BYPASS input of the subwoofer.

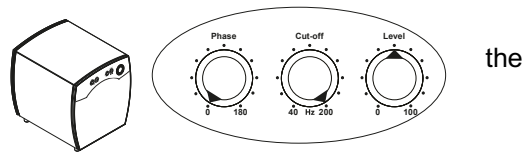
In a traditional single subwoofer setup, connect the subwoofer to the left analog output on the TDAI-1120. For a stereo subwoofer setup, or if you have a subwoofer which has stereo input, use both left and right analog outputs.

Warning: Do not connect the TDAI-1120 to a subwoofer with High Level / speaker terminal inputs, as this will seriously damage the amplifier.



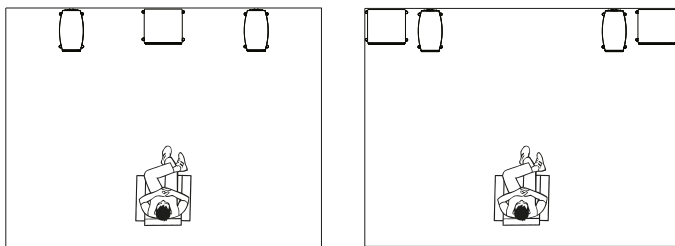
Subwoofer controls

1. Phase adjustment should be 0°.
2. The subwoofer cut-off frequency should be set to highest possible frequency range.
3. Level should be set to 50% of the maximum.



Subwoofer placement

With a single subwoofer, we recommend placing the subwoofer against the wall between the main speakers. With two subwoofers, you should position one in each front corner, in line with the main speakers.



Turning on the TDAI-1120 for the first time

When you connect the TDAI-1120 to mains power, the Lyngdorf logo on the front will be blinking through-out the start-up process. When the logo stops blinking, the TDAI-1120 is ready for operation and can play audio from external sources

Network connection by cable (recommended)


If the TDAI-1120 is connected to your network by cable, you can now access the TDAI-1120 by the Lyngdorf Remote Application for IOS and Android devices, and you can stream to the TDAI-1120 from your music applications.

Establishing Wi-Fi connection

The TDAI-1120 can be connected to your Wi-Fi network both through a simple iPhone/iPad functionality (WAC mode) or by using the manual WPS functionality on routers.

Procedure with iPhone or iPad (WAC):

If the TDAI-1120 was not connected by cable, the Wi-Fi symbol on the front will be flashing quickly

The TDAI-1120 now appears on all your apple devices in the Wi-Fi section of Settings . When selected the Wi-Fi settings will be transferred from your iPhone/iPad to your TDAI-1120.

If you do not have an iPhone or iPad, the manual procedure for connecting is (WPS):

Press and hold the “SOURCE/MUTE” button

After 5 seconds the TDAI-1120 will activate WPS and the WIFI symbol is flashing slowly.

Release the “SOURCE/MUTE” button and the TDAI-1120 will search for a WPS connection for 15 minutes.

Now press the WPS button on your Wi-Fi router and the TDAI-1120 will connect.

Notes:

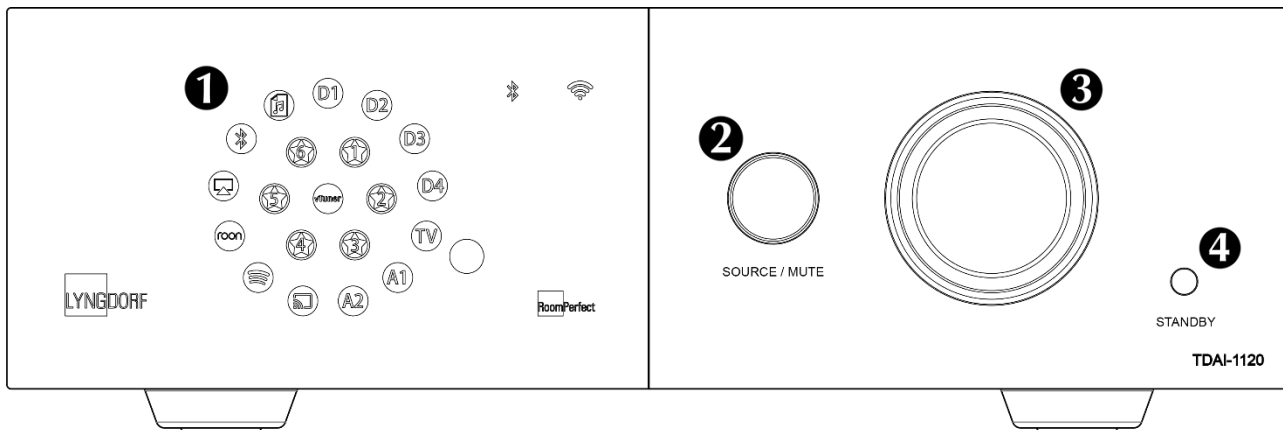
Press & hold the “SOURCE/MUTE” button for 5 seconds for activating the WAC function – and holding the button for 10 seconds will activate the WPS function again.

Holding the “SOURCE/MUTE” button for 15 seconds will make the TDAI-1120 exit the WAC/WPS connectivity selection.

“WPS” is short for “Wi-Fi Protected Setup” and is available on all modern network routers.

“WAC” is short for “Wireless Accessory Configuration” and is designed by Apple for easy connection of new Wi-Fi equipment

How to use the TDAI-1120



Turn on the TDAI-1120 by pressing the Standby button **1**

Turn the Source button to select the music source **2**
– see selection on the Display. **3**

Press the same button to Mute the sound temporarily – un-Mute by pressing the same button. **2**

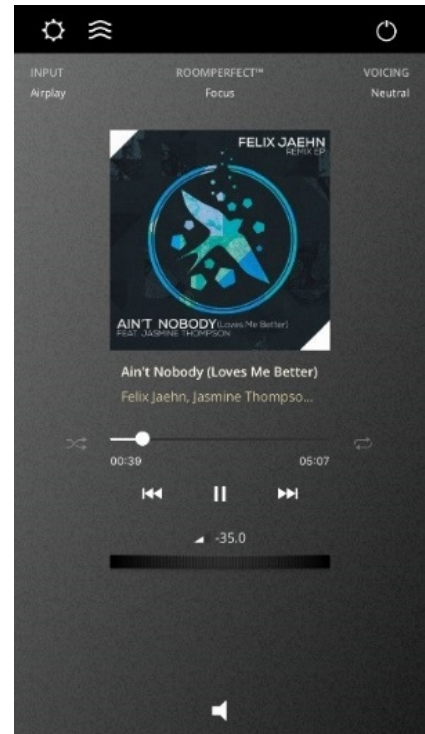
Turn volume up and down on the volume knob. **3**

- The light relates to the position of the volume knob – red light is not necessarily a problem, if the source volume level is low. When the music is sounding harsh and distorted, your speakers might be damaged. You cannot damage the amplifier by turning the volume up.

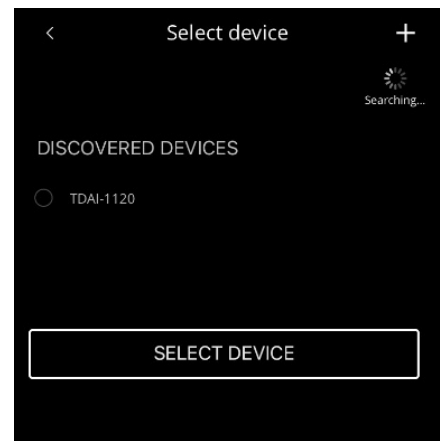
Remote Control Application

For Android and IOS based phones you will be able to download the Lyngdorf Remote application, which will allow you to handle the operation of your TDAI-1120 – see below examples.

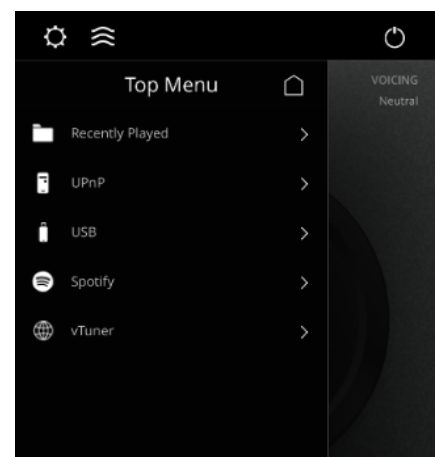
Select input, listening position and voicing directly, and see the signal information in the volume wheel, which you can operate like you operate the volume on the amplifier itself. When using the internal media player album information will appear, when available.



Top left icon will access the connection settings for selecting the Lyngdorf product to be controlled, and open for the web interface for accessing the setup.

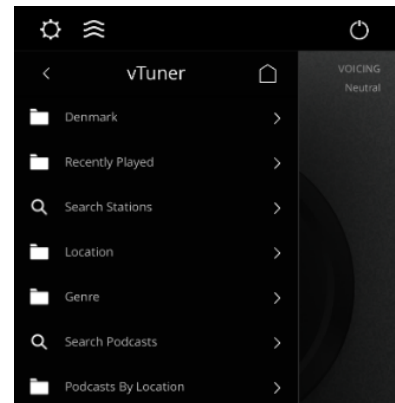


The next icon will open the interface for streaming music and the top right icon will turn the amplifier on or off.



Using the vTuner menu will allow you to play all radio stations available on the internet

Note that through the website you can save up to 5 stations as pre-sets, which then are directly available from the input selector on the front or through the Lyngdorf Remote Application.



Discover the TDAI-1120 setup page

When the TDAI-1120 is connected to your local network you can connect to your TDAI-1120 in different ways:

Use the Lyngdorf remote application to discover the device and enter the homepage. In the setup menu, you will be able to find the network device address and a direct link to the setup page on your internet browser.

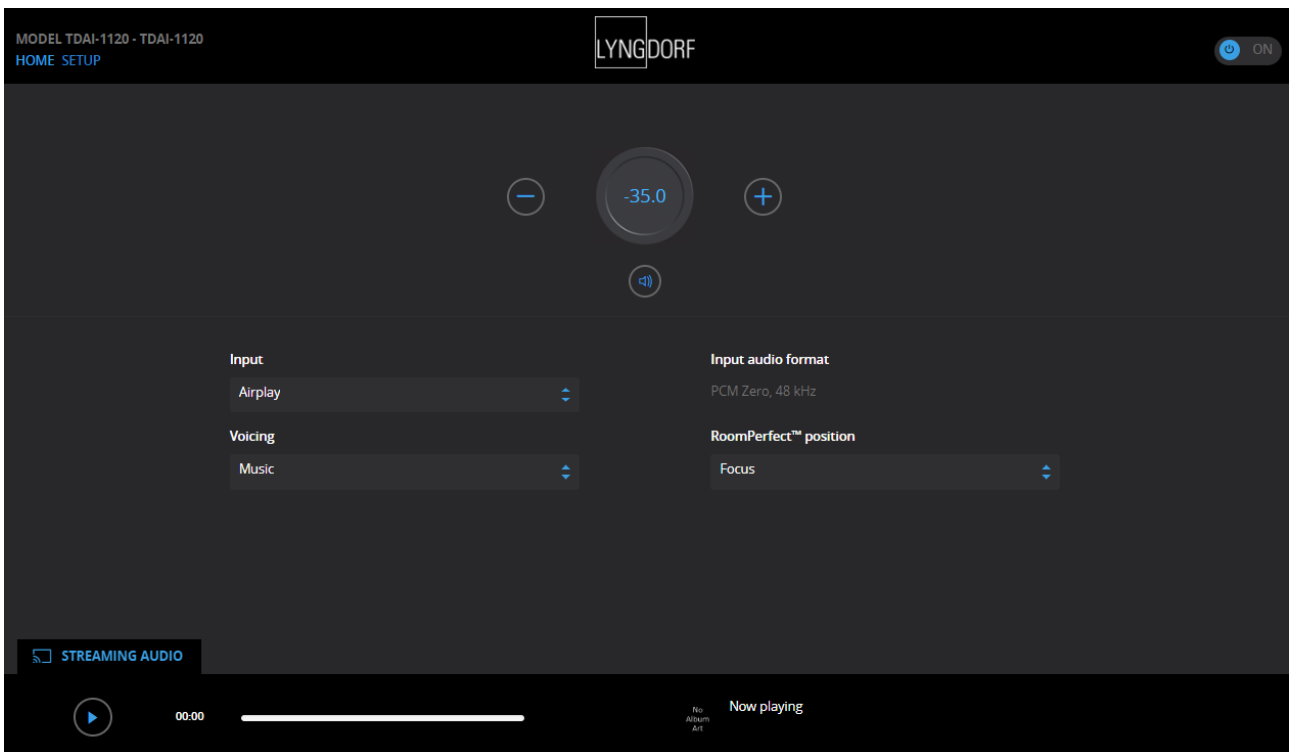
If you do not want to install the Remote Control Application, you can type the following in a browser on any device on your network:

tdai1120.local.

Finalizing the setup

Now you start enjoying the music, but we recommend that you adjust the settings and do a RoomPerfect™ calibration to enjoy all what the TDAI-1120 can offer.

Open the web-page of the TDAI-1120 as described earlier, and we will introduce you to the available menus:



The HOME screen refers to the daily operation as performed with the remote control. The page displays selected input and formats and you can control the volume setting

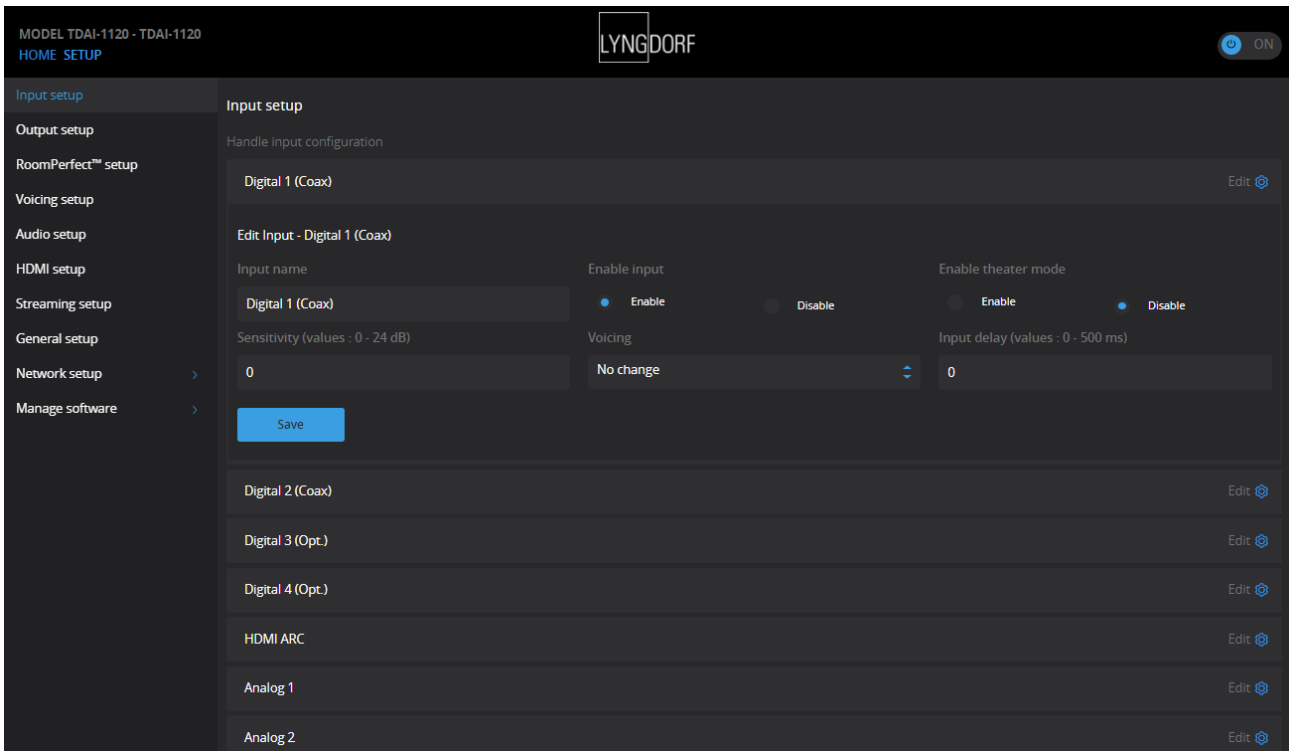
The SETUP section will be described in the following pages.

The STREAMING AUDIO interface for controlling the built-in media streamer is found in the bottom section of this page. For information as to the use of the interface see section for Streaming Setup.

Hot tip: On your mobile device the Home Screen page of your amplifier can be saved as an icon for swift access to operation of the TDAI-3400.

Setup menu walkthrough

Input setup



4.1.2 Input name

Changes the name of the selected input.

Note: To remove all text after the blinking marker, press and hold the “Down” button.

4.1.3 Sensitivity

Enables you to match input levels from different sources. Can be adjusted up to +24dB.

4.1.4 Default voicing

Selects a default voicing for the input which is active when in this menu. If you always want extra bass on your gaming console audio, for example, set that voicing here.

4.1.5 Home theater

Turns the amplifier into a dedicated power amplifier for the input which is active when in this menu. .

Warning: This feature bypasses the volume control!

Do not test this setting with a CD player or similar unregulated signal!

This feature might be selected if you are using the TDAI-1120 in a home theater setup where it is used to power and calibrate the front speakers and/or subwoofer. Connect your home theater processor to the selected input.

When selecting other inputs, the amplifier returns to the last current volume.

4.1.6 Lipsync delay

If the connection of a display has introduced asynchronous playback of audio and video, you can select a delay time in to ensure that the video and audio signals are played back simultaneously.

4.2 RoomPerfect™ setup

4.2.1 RoomPerfect™ guide

This will start the guided RoomPerfect™ setup and will erase previously stored calibrations. When completed, the following menu items are available in the RoomPerfect™ setup menu.

4.2.2 Status

This screen shows how many room measurements have been made, together with the Room Knowledge and Room Correction index.

The Room Knowledge index is an estimate of how much of the room's acoustical properties have been learned from the room measurements. The higher the Room Knowledge index, the greater the accuracy of the calibration.

Hot Tip: The objective is to have the Room Knowledge index to increase as slowly as possible. This indicates that each measurement holds new data for the calibration. When the measurement does not give new data, the index will increase quickly.

The Room Correction index is an estimate of how much the calibration filter will affect the sound reproduction by evaluating the size of the filters as well as the frequencies adjusted. This index is not absolute. For best results, rely on your own experience of the effects of the filter.

A low Room Correction filter on the focus position could indicate that you have positioned your speakers in order to optimize the frequency response and not the timing.

Check “Tips for setting up speakers” on page 6 and complete a new RoomPerfect™ calibration.

4.2.3 Add focus position

If you would like to add an additional focus position, the chair next to the couch perhaps, it can be done here. It is possible to have up to 8 different focus positions.

The saved calibration volume from the RoomPerfect™ guided setup is used as a default when adding extra focus positions. The volume can be changed at any time between measurements to suit a particular situation. This will not affect the quality of the measurement or the end result.

4.2.4 Add room measurement

It is possible to add more room measurements, which can increase Room Knowledge and thereby fine tune all the room correction filters.

4.3 Volume

4.3.1. Default volume

The default volume setting controls the default volume at start-up.

4.3.2 Maximum volume

The maximum volume setting is a safety precaution used for limiting the maximum volume which can be achieved by spinning the wheel or increasing volume via the remote. This can be set to protect your loudspeakers against overload.

4.4 Voicings

Enables and disables voicings to enable quicker selection of your preferred equalization.

4.5 Display

4.5.1 Display brightness

Display brightness is used to control the brightness of the display.

4.5.2 Display timeout

If enabled, the main display will switch off after 10 seconds of inactivity.

4.6 HDMI (Audio Input from TV)

HDMI (High-Definition Multimedia Interface) is a standard for transmission of video and audio from source to playback device. The connection exchanges information as to available types of data against what the playback devices will accept.

CEC (Consumer Electronics Control) is a HDMI feature designed to allow commands to be sent from one product to another – as examples: allowing the player to turn on the television or to control the volume setting of the TDAI-1120 by using the remote control of the TV.

In all setups the level of CEC implementation on the television sets the limitation to the possible integration, and even if brand new, not all products will support CEC.

4.6.1 CEC enable

Enables and disables CEC (Consumer Electronics Control) over HDMI.

Note: As default, CEC is not active on HDMI to comply with regulations requiring a very low standby power. Turning it on will raise standby power to 1.2W

4.6.2 CEC power control

Enables and disables CEC power handling.

This means when you turn on your TV or Blu-Ray player, the TDAI-1120 will automatically switch on from standby as well. Furthermore, if you switch the HDMI input to a product which is in standby, it will be turned on.

Note: Menu only appears if CEC is enabled.

4.6.3 CEC audio system

Enables and disables CEC audio system.

When enabled the TDAI-1120 tells the TV to disable its built-in speaker and to use the ones connected to the TDAI-1120. Furthermore, this enables you to control the TDAI-1120 volume with the TV's remote

4.6.4 TV input

Select "HDMI ARC" if your TV supports ARC (Audio Return Channel) over its HDMI connection. This means your TV can stream audio back through its HDMI connection to the TDAI-1120.

If your TV doesn't support ARC, you can connect an analog or digital audio output from the TV to an audio input on TDAI-1120. Select the used input in this menu so the TDAI-1120 will know from which input the audio from the TV is coming. Remember to set up the TV to output to PCM on the digital output.

Note: If you don't get any sound when the TV is connected to an alternative audio input, you may need to turn off your TV and turn it back on again.

4.6.5 Output enable

Enables and disables HDMI audio output to the TV. This feature is only available if the digital output connector is not in use.

When enabled, this feature will send the current digital audio signal through the HDMI cable to the TV. Disable if you want the TDAI-1120 to send the current audio signal to the digital output connector on the back.

5 Advanced settings

5.1 Auto off

If you don't press any buttons or audio isn't being played, this sets the idle time required for automatic shut-down of the amplifier.

5.2 Remote control

Activate or deactivate the remote control. This function is useful if you are using a home automation system and other remotes are using the same IR codes as the TDAI-1120 remote.

A home automation system is connected to the TDAI-1120 through the RS232 connector. Codes are available for download from www.lyngdorf.com

5.3 ICC

Audio signals that exceed 0 dBFS (decibels relative to full scale) will be clipped when processed in the audio chain and will result in more or less distortion. With ICC (Intersample Clipping Correction) the TDAI-1120 will dynamically allow for extra headroom to avoid clipping.

ICC (Intersample Clipping Correction) can be set to auto or disabled.

The TDAI-1120 will continuously adjust the ICC in order to avoid clipping. Changing inputs or going into standby mode will reset the ICC.

If you switch to an active audio input and press info on the remote, you will see a “peak level” measurement. This will show you if your signal has exceeded 0 dBFS.

5.4 Speaker setup guide

This starts the guided speaker setup and RoomPerfect™ setup. See “RoomPerfect” on page 10 for instructions in how to calibrate your system.

Warning: This will erase ALL previously stored speaker settings and RoomPerfect™ measurements.

5.5 Second Speaker Setup

Here you have the option to store a second speaker setup. This will allow you to test another setup or to have calibrated setups with and without a subwoofer, etc.

Enabling this will start the Guided Speaker Setup. When complete, the menu item Speaker Setup will be available in the main menu, allowing you to switch between the two setups.

5.6 Outputs

The menus in outputs are where you will manually set up delays and crossover filters for your speaker system. If the guided speaker setup has been completed the pre-made settings will be shown; these can be optimized as well.

When building active speaker systems, it is recommended that you use the original crossover point(s) used by the manufacturer. Due to the short wavelengths of the mid/high frequencies, it is essential that crossover frequency, filter type, order, and delay are set correctly. Therefore, creating filters for speakers is an iterative process that requires great knowledge and several critical listening sessions in order to achieve seamless integration of the different speaker drivers.

Note: If you change the output setting, you have to do a new RoomPerfect™ calibration.

5.6.1 Delays

The available settings are:

Distance

If you are using a setup with speakers and/or subwoofers located at an identical distance to the listening position, you don't need to set a distance. If the distances are not identical, you need to enter it in order to ensure that the sound from each loudspeaker reaches the listening position simultaneously.

To correctly measure the distance, please see Guided Speaker Setup.

Amplifier delay

On analog and digital out, you can set an amplifier delay. If you have an active subwoofer or an additional amplifier, there will be a natural electronic delay in these products.

Refer to the original manufacturer's instructions to obtain the correct amplifier delay.

5.6.2 Main speaker output

The available settings are:

High pass removes the frequencies below the crossover frequency.

Low pass removes the frequencies above the crossover frequency.

Full range allows the signal to pass unfiltered.

Off mutes the output.

5.6.3 Analog output

The available settings are:

High pass removes the frequencies below the crossover frequency.

Low pass removes the frequencies above the crossover frequency.

Full range allows the signal to pass unfiltered.

Headphone disables RoomPerfect™, voicings are still available. Muting the TDAI-1120 will only mute the speakers, not this output.

Tape Out disables RoomPerfect™, voicings and volume control.

Off mutes the output.

Volume

The volume can be set to regulated or full scale. Regulated means that the output level will follow the level of the volume control. Full scale means there is a constant full scale output.

Warning: If full scale is selected, you will have full volume output, and this can overload and damage speakers.

Output level

This adjusts the overall output level in order to align the level of a subwoofer to the level of your main speakers. Making the output adjustment here is far better than attenuating the level on the subwoofer itself.

L/R signals

Choose whether you want the output to be a stereo or mono signal. Choose mono if you use a single subwoofer with mono analog input; choose stereo if you have two subwoofers or one with a stereo input. See “Connecting the subwoofer” chapter.

5.6.4 Digital output

The available settings are:

High pass removes the frequencies below the crossover frequency.

Low pass removes the frequencies above the crossover frequency.

Full range allows the signal to pass unfiltered.

Headphone disables RoomPerfect™, voicings are still available. Muting the TDAI-1120 will only mute the speakers, not this output.

Tape Out disables RoomPerfect™, voicings and volume control.

Volume

The volume can be set to regulated or full scale. Regulated means that the output level will follow the level of the volume control.

Warning: If full scale is selected, you will have full volume output. This can overload and damage connected active speakers.

Output level

This adjusts the overall output level in order to align the level of a subwoofer to the level of your main speakers. Making the output adjustment here is far better than attenuating the level on the subwoofer itself.

L/R signals

Choose whether you want the output to be a stereo or mono signal. Choose mono if you use a single subwoofer with mono digital input; choose stereo if you have two subwoofers or one with a stereo input.

5.6.5 Low pass filter

If a filter is selected, the frequencies below the selected crossover frequency will be directed through the designated output terminals.

The available settings are:

Type

LR: (Linkwitz Riley) 2nd, 4th or 8th order.

BW: (Butterworth) 1st, 2nd or 4th order.

In setups using conventional active subwoofers, we recommend using a 2nd order Butterworth filter.

In active speaker systems, we recommend starting with a 4th order Linkwitz Riley filter.

In a configuration with Lyngdorf Audio BW-1 speakers, we recommend using a 4th order Linkwitz Riley filter.

5.6.6 High pass filter

If a filter is selected, the frequencies above the selected crossover frequency will be directed through the designated output terminals.

The available settings are:

Type

LR: (Linkwitz Riley) 2nd, 4th or 8th order.

BW: (Butterworth) 1st, 2nd or 4th order.

Choose a filter type that matches the one you have selected for the low pass filter.

Frequency

The crossover frequency can be selected anywhere between 20 – 9999Hz.

5.7 Trigger Mode

The trigger input can be used to activate the TDAI-1120 from a source.

The available settings are Amp. Power Mode or a specific input.

Amp. Power Mode will start the TDAI-1120 on the input last used.

If you want the TDAI-1120 to start on a specific input when triggered, choose it here.

Note: If the TDAI-1120 has been switched to another input, the trigger command from the source connected will not turn off the amplifier.

5.8 Lock setup

Lock the menu system to avoid unintentional changes.

Unlock the menu system by entering the code 7800. When the code has been entered, and you exit the setup menus, the menu lock will reactivate automatically after 5 minutes.

5.9 Software info

Lists the software versions the TDAI-1120 is using. Refer to www.lyngdorf.com for the latest software.

To update the TDAI-1120:

Save the new software on a FAT formatted USB drive.

Insert the USB drive into the “SW Update” connector on the back of the TDAI-1120.

Turn off the TDAI-1120 at the main switch on the back.

Hold down the standby button on the front and turn on the main switch on the back.

When the display says UPDATING, release the standby button and the TDAI-1120 will update the software.

When the update is finished, the amplifier goes into standby.

5.10 Factory reset

Restores the system to the default factory settings.

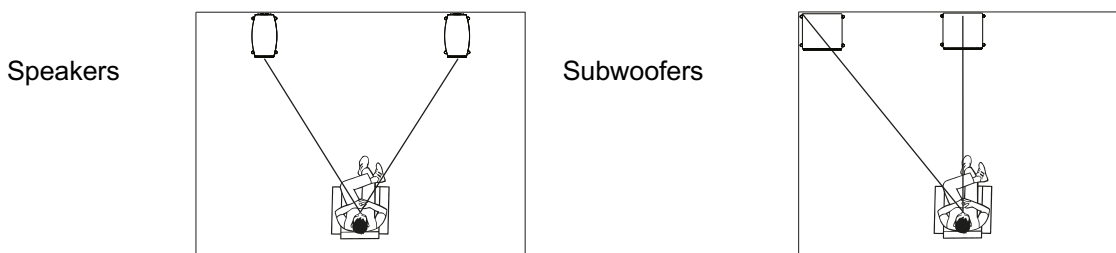
Warning: All user preference settings, system data, and RoomPerfect™ data are lost when restoring to default settings!

Measuring distances

Splitting the sound into speakers and subwoofer(s) requires that the outputs are adjusted in time (Phase), so that the two parts of the sound arrives to your ear at the same time. This is achieved by measuring the actual distances to your speakers and subwoofer(s), and through the differences in distances the TDAI-1120 can calculate the delays, which needs to be added to each output.

When measuring the distance to your speakers, measure from the preferred listening position (the focus position) to the front of the speakers.

When measuring the distance to a subwoofer, measure from the preferred listening position to the back corner of the subwoofer.



RoomPerfect™

RoomPerfect™ is designed to analyse and correct for the negative effects that the listening room has on the speaker sound.

Global listening: The global filter improves sound quality across the whole room. When you are moving around a room, the global filter gives the best result.

Focus listening: The focus filter improves the sound quality at a specific listening position, called a “focus position.” This makes the focus filter the best solution for optimal sound quality at a single listening position.

Voicings: A voicing is an equalizer filter that can be activated to amplify or attenuate certain frequencies according to your personal preferences. This equalization is an addition to the RoomPerfect™ corrections. The equalizer settings of a given voicing can be seen on the display of the amplifier.

Placing the microphone in the focus position

When you are prompted to place the microphone in the focus position, connect the microphone to the microphone input on the back panel using the provided microphone cable and place the microphone, using the microphone stand, in your primary listening position. The height and the orientation of the microphone should correspond to your head's height and direction.

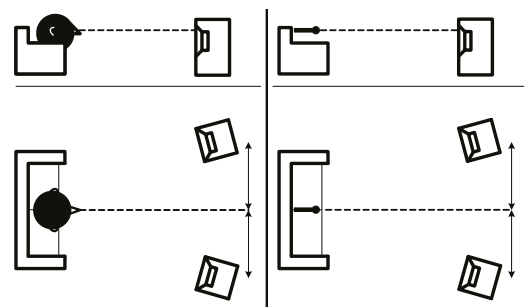
Press enter and a test signal will start from the left speaker. The TDAI-1120 will give an estimated optimal volume for calibrating the system or will accept the current volume. Adjust the volume if required and retry the measurement.

The calibration volume should not be so loud that it is inconvenient to you, or that it causes damage to your loudspeakers. If this is the case, set it to a lower and more appropriate level. A low volume can result in a longer calibration time (in excess of two minutes) or a measurement time out. A low volume and long measurement will not affect the quality of the end result.

Measuring the focus position

When the calibration volume has been set, RoomPerfect™ will send a range of tones to measure the focus position. If there is noise in the room, the measurement may take longer. This will not affect the quality of the result.

See “RoomPerfect troubleshooting” on page 18 if you experience problems.



Measuring random room positions

When the focus position has been measured, the next step is to measure the acoustical properties of the room. It is important to perform well spaced measurements to get a comprehensive image of the acoustical properties of the room. See “RoomPerfect troubleshooting” on page 18 if the measurement stops prematurely.

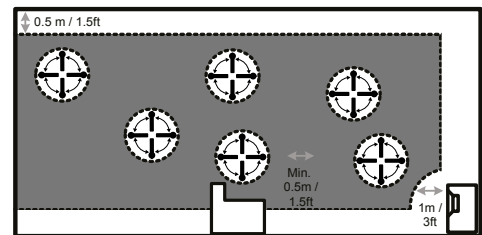
Keep taking measurements until Room Knowledge reaches minimum 90%.

These are the rules of thumb when measuring the room:

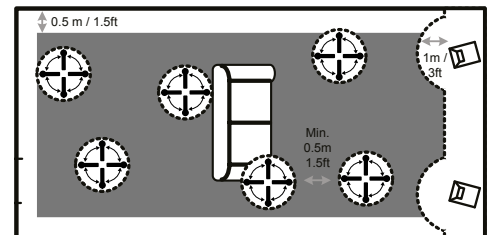
- the microphone must always have a clear line of sight to the tweeter mid-range of the speaker.
- the microphone should be in random and varying positions, heights, and orientations.

Point it up/down/sideways, the more random positions the better.

- the measurements should cover the entire room, not only your listening area.



- the microphone should not be closer than 0.5m/1.5ft from the floor, ceiling and walls.
- the microphone should be at least 1m/3ft from the front of the loudspeakers.
- there should be at least 50cm/1.5ft between each measurement.
- do not take symmetrical measurements in the room.



Room measurements above 90% room knowledge

Note that Room Knowledge is calculated by the computer as how much from the new measurement it already knows. If the Room Knowledge index does not increase after a measurement, you have added a good measurement with a lot of new information.

To fully optimize RoomPerfect™'s understanding of the room's acoustical properties, we recommend you keep doing measurements until the Room Knowledge is above 95%. The higher the Room Knowledge, the more accurate the room correction filters will be.

Calculation of focus and global filters

When room measurements are complete, the TDAI-1120 will calculate the focus and global filters automatically.

Installing the USB streaming audio driver

To stream audio from a Windows PC to the TDAI-1120, you need to install a dedicated Windows drivers (includes ASIO driver), which will ensure correct operation and optimal performance. The driver can be found on Lyngdorf.com. Mac and Linux users do not need to install any drivers to stream audio to the TDAI-1120.

Using the USB streaming audio input

To stream music to the TDAI-1120, connect it to your computer via a USB cable.

Select “USB” as input on the TDAI-1120 and start playing music on your computer.

Information on Lyngdorf front panel logo

The LYNGDORF front panel logo is blinking in the following situations:

- When the TDAI-1120 is starting after mains has been disconnected.
- When the TDAI-1120 is executing a firmware update.
- When the device is going in and out of deep sleep standby state.

In all of these situations user operatin is not possible.

Note: If for some reason the device should be stuck in an “animating logo situation” for more than 10 minutes a power-cycle executed by removing the mains power supply to the device might be required.

FAQ and recommendations

When do I need to do a new RoomPerfect™ calibration?

If you change the position of speakers, the crossover settings or if you change your furniture position or type, you need to do a new calibration, as these changes have an impact on the room acoustics.

What should I set my CD-players sample rate output to?

44.1 kHz. This will allow the ICC feature of the TDAI-1120 to avoid clipping of the signal.

My remote control (optional accessory) does not work properly

Press the “AMP” button to enable the remote control to operate the TDAI-1120 amplifier.

The multifunction remote control can operate several Lyngdorf Audio products.

Check the batteries.

RoomPerfect™ troubleshooting

The calibration microphone is very sensitive and may pick up unwanted noise, including subsonic signals and background noise, which disturbs the measurements. If the signal is disturbed it will take longer for the system to make a correct measurement.

A measurement that has been disturbed by noise but completed will always be correct; it is not necessary to redo it. If the measurement has stopped due to an error, one of the following error messages will be shown.

Signal error! Check microphone and cable, then press enter

No microphone is connected, or the microphone cable is defective. Check that the microphone cable is connected to the microphone socket on the back panel. If the problem continues, test the microphone cable by connecting the microphone directly to the microphone socket and select Retry.

If the microphone is detected, replace the microphone cable and retry the measurement.

Error: Signal clipping - or - Error: Too much noise

Either the incoming signal has been classified as too loud, resulting in clipping or distortion, or a loud noise in the immediate environment has corrupted the measurement results. If a loud noise has in fact occurred, such as the sound of a closing door, reduce noise levels inside and in the immediate vicinity of the room and repeat the measurement. If no loud noise has occurred, reduce the volume of the signal and repeat the measurement.

Error: Signal too low

This error message is displayed when the measurement has lasted more than 5 minutes for the low-frequency signal or more than 2 minutes for the high-frequency signal. This happens most often when using a low-level measuring signal compared to the background noise in the listening environment, which results in prolonged measuring times. Raise the measuring signal volume or reduce the noise in the environment before continuing with the measurement.

Cleaning and maintenance

The TDAI-1120 does not require any regular maintenance except to keep its exterior clean. Simply wipe it with a clean, soft cloth. A small amount of non-abrasive cleaner may be used on the cloth to remove any dirt or fingerprints. Do not use abrasive cleaners or cleaners containing liquid solvents.

Serial Control Manual

To get a copy of the Serial Control Manual, which describes how the serial control interface of the device works, download it from www.lyngdorf.com, or contact your local Lyngdorf Audio representative.

Writing software for controlling requires special knowledge. Lyngdorf Audio will not support in writing any serial control software.

Technical assistance

For the latest version of this manual, please check the Lyngdorf Audio website: www.lyngdorf.com.

If you have any problems with or questions regarding your Lyngdorf Audio product, please contact your nearest Lyngdorf Audio dealer.

Enjoy !

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